

WAKE FOREST UNIVERSITY
SCHOOL OF MEDICINE

CURRICULUM VITAE

NAME:

James C. Eisenach, M.D.

CURRENT ACADEMIC TITLE:

FM James, III Professor of Anesthesiology

ADDRESS:

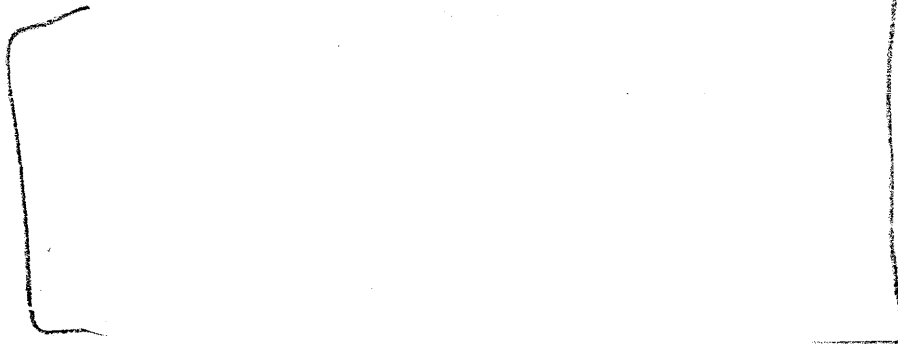
RESIDENCE:



BUSINESS:

Wake Forest University Medical Center
Department of Anesthesiology
Section on Obstetric and Gynecologic Anesthesiology
Medical Center Boulevard
Winston-Salem, North Carolina 27157-1009

PERSONAL INFORMATION:



EDUCATION:

1976

University of Nebraska
Lincoln, Nebraska
B.A.

1978

California Institute of Technology
Pasadena, California
M.S.

EDUCATION: (Continued)

DISSERTATION:

Eisenach JC: O-substituted serine and threonine residues in acetylcholine receptor protein from Torpedo californica and synthesis of a new fluorescent probe for ligand binding to acetylcholine receptor protein from Torpedo californica. MS Thesis, California Institute of Technology, 1978.
Advisor: M. A. Raftery, Ph.D.

1982

University of California
San Francisco, California
M.D.

POSTDOCTORAL TRAINING:

1982-1983

Medicine Internship
Mt. Zion Hospital
San Francisco, California

1983-1985

Anesthesia Residency
Mayo Clinic
Rochester, Minnesota
(Chief Resident 1985)

1985-1986

Fellow
Obstetric Anesthesia
Wake Forest University Medical Center
Winston-Salem, North Carolina

PROFESSIONAL LICENSURE:

North Carolina ~~_____~~

SPECIALTY CERTIFICATION:

1986

Diplomate
American Board of Anesthesiology

EMPLOYMENT:

2000-Present

Member, Graduate Faculty
Molecular Medicine Program
Wake Forest University Medical Center
Winston-Salem, North Carolina

1998-Present

Vice Chairman for Research
Section of Obstetric Anesthesia
Wake Forest University Medical Center
Winston-Salem, North Carolina

EMPLOYMENT: (Continued)

1995-Present	FM James, III Professor Department of Anesthesiology Section of Obstetric Anesthesia Wake Forest University Medical Center Winston-Salem, North Carolina
1991-1995	Associate Professor Department of Anesthesiology Section of Obstetric Anesthesia Wake Forest University Medical Center Winston-Salem, North Carolina
1989-Present	Member, Graduate Faculty Center for Investigative Neuroscience Wake Forest University Medical Center Winston-Salem, North Carolina
1987-1991	Assistant Professor Department of Anesthesiology Section of Obstetric Anesthesia Wake Forest University Medical Center Winston-Salem, North Carolina
1986-1987	Instructor Department of Anesthesiology Section of Obstetric Anesthesia Wake Forest University Medical Center Winston-Salem, North Carolina
June-September 1976	Research Chemist Kodak Research Laboratories Rochester, New York

OTHER PROFESSIONAL APPOINTMENTS AND INSTITUTIONAL SERVICE:

AFFILIATION

1985-Present	Forsyth Medical Center Department of Obstetric Anesthesiology Winston-Salem, North Carolina
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EDITORIAL SERVICE

Invited Reviewer:

1988-Present	<i>American Journal of Obstetrics and Gynecology; American Journal of Physiology; Anesthesia and Analgesia; Archives of Medical Research; Atherosclerosis; Brain Research Bulletin; Cancer Control;</i>
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OTHER PROFESSIONAL APPOINTMENTS AND INSTITUTIONAL SERVICE: (Continued)

EDITORIAL SERVICE

European Journal of Neuroscience; European Journal of Pain; Experimental and Clinical Psychopharmacology; Experimental Neurology; International Journal of Obstetric Anesthesia; Journal of Neurochemistry; Journal of Neuroscience; Journal of Pain and Symptom Management; Journal of the Peripheral Nervous System; Journal of Pharmaceutical Sciences; Journal of Pharmacology; Journal of Pharmacology and Experimental Therapeutics; Laboratory Animal Science; Life Sciences; Mayo Clinic Proceedings; Molecular Pharmacology; Neuroscience; Neuropharmacology; Pain Forum; The Clinical Journal of Pain; The Lancet

EDITORIAL BOARDS:

1991-1994	Associate Editor, <i>Anesthesiology</i>
1995-Present	Editor, <i>Anesthesiology</i>
1995-Present	Editor for Book Reviews and Scientific Meetings, <i>Anesthesiology</i>
1993-Present	Associate Editor, <i>Regional Anesthesia and Pain Medicine</i>
1999-Present	Editor, <i>The Journal of Pain</i>
1999-Present	Associate Editor, <i>Pain</i>
2000-Present	Guest Editor, <i>Anesthesia and Analgesia</i>
2001-Present	Advisory Board, <i>Journal of Anesthesia</i>

GRANT REVIEW

Ad hoc Reviewer:

NC Innovation Research Fund Award; Veterans Administration NIH Center Grant (1989, 1998); NIH Special Study Section (Program Projects on Chronic Pain Treatment, 1995); The Israel Science Foundation; NIH Intramural Review (Pain and Sensory Mechanisms Branch, NIDR); Wellcome Trust

Member of Review Committee:

Veterans Administration Merit Review Committee (1999-2003)
NIH Study Section - Surgery, Anesthesia, and Trauma (2001-2005)

CONSULTATION TO PHARMACEUTICAL INDUSTRY

1989-1990	Anaquest; Bard Medsystems
1993	Synaptic Pharmaceuticals; Cytotherapeutics
1996	Abbott Laboratories; Depo Tech Corporation
1997	Roxanne Laboratories; Amgen, Inc.
1999	Adolor Corporation; Grunenthal, Inc.; Eli Lilly Corporation
2000	Parke-Davis; Cognetex; Medco; UCB Pharma; Sky Pharma; Glaxo
2001	Neuromed; Pfizer; Eli Lilly; Cypress; Elan

OTHER PROFESSIONAL APPOINTMENTS AND INSTITUTIONAL SERVICE: (Continued)

OTHER SERVICE

1992	Question Writer, Certificate of Added Qualifications in Pain Management of the American Board of Anesthesiology
1992-1994	Member, Board of Directors, Society for Obstetric Anesthesia and Perinatology
1994-1996	Member, Board of Directors, Obstetric Anesthesia and Perinatology Endowment Fund
1994-1996	President, Pain Outcomes Research
1995	Member, Search Committee for Editor-in-Chief, Anesthesiology
1995-1998	Member, Scientific Advisory Board; Association of University Anesthesiologists (Chair, 1997-1998)
1997	President, Western North Carolina Chapter of the Society for Neuroscience
1999	Instructor, Sensory Neuroscience II. Somatosensation, taste, and olfaction(Graduate School Course)
2002	President, American Society of Regional Anesthesia and Pain Medicine

GRADUATE STUDENTS, MEDICAL STUDENTS, AND POSTDOCTORAL FELLOWS TRAINED:



PROFESSIONAL MEMBERSHIPS:

The American Society of Anesthesiologists
International Anesthesia Research Association
North Carolina Society of Anesthesiologists

PROFESSIONAL MEMBERSHIPS: (Continued)

North Carolina Medical Society
American Medical Association
Society of Obstetric Anesthesia and Perinatology
American Pain Society
Society for Neuroscience
International Association for the Study of Pain
Association of University Anesthetists
American Society for Clinical Pharmacology and Therapeutics

COMMITTEE MEMBERSHIPS:

1987-1989	Clinical Research Practices Committee Wake Forest University Medical Center
1988-1993	Task Force on Acute Pain International Association for the Study of Pain
1989-1992	Animal Care and Use Committee Wake Forest University Medical Center
1991-1995	Anesthetic and Life Support Drugs Advisory Committee, Department of Health and Human Services (Chairman, 1994-1995)
1992-1993; 1998-Present	Chairman; Committee on Research Department of Anesthesiology Wake Forest University Medical Center
1992	Consultant to Gastroenterology Advisory Committee Food and Drug Administration
1993-1995	Committee on Research Wake Forest University Medical Center
1993	Co-Chairman Organizing Committee Association of University Anesthesiologists
1993	Chairman Organizing Committee International Symposium on α_2 -Adrenergic Mechanisms in Spinal Analgesia Lucerne, Switzerland
1996, 2001-Present	Advisory Committee General Clinical Research Center Wake Forest University Medical Center
1995	Thesis Defense Jury Member for _____ Université Catholique du Louvain, Brussels, Belgium

COMMITTEE MEMBERSHIPS: (Continued)

(02/21/03- Anes)

1996	President, Organizing Committee, Satellite Symposium to IASP World Congress, Spinal Analgesics: from Animals to Humans
1999	Thesis Defense Jury Member for _____ Université de Paris, Sud, France
1999	Committee on Faculty Consultations with Industry Wake Forest University School of Medicine
1999	Advisory Panel for Funding Directions, NIGMS of NIH
1999	Speaker and Advisory Panel for Funding in Biomarkers and Surrogate Outcomes, NIH
2000	Thesis Defense Jury Member for _____ Université Catholique du Louvain, Brussels, Belgium
2000-Present	Chairman, Conflict of Interest Review Committee Wake Forest University School of Medicine
2000-2002	Member, Mentoring Program Oversight Committee Wake Forest University School of Medicine
2001	Member, IARS Frontiers Award Review Committee
2001-2002	Member, Scientific Organizing Committee, American Pain Society
<u>American Society of Anesthesiologists Committees</u>	
1988-Present	Committee on Research
1992-1999, 2001-Present	Subcommittee on Obstetrics and Perinatology, Chair 1994
1992-1996, 1999	Committee on Scientific Papers
1996-1999	Committee on Refresher Courses
1997-Present	Subcommittee on Drug Disposition and Anesthetic Action, Chair 1999
<u>American Society of Regional Anesthesia Committees</u>	
1993-Present	Research Committee
1993-1998	Scientific Program Committee, Chair 1996
<u>American Society of Regional Anesthesia Committees</u>	
1995-Present	Board of Directors
1998-Present	Chair, Education Committee
1999	Chairman, Organizing Committee Review Course on Obstetric Anesthesia, Steamboat Springs, CO (ASRA/SNAP)
2000; 2001; 2002	Vice President for Scientific Affairs; President Elect; President

HONORS AND AWARDS:

1972-1978	Regents' Scholar, Chancellor's Scholar, Erwin W. Wilson Award, American Chemical Society Award, Phi Beta Kappa, Graduation with High Distinction Graduate Howard F. Lucas Fellow
1986	First Prize, Current Research by New Investigators Competition, 40th Postgraduate Assembly in Anesthesiology of the New York State Society of Anesthesiology, New York, NY
1987	First Prize, Gertie Marx Symposium of the 19th Annual Meeting of the Society for Obstetric Anesthesia and Perinatology, Halifax, Nova Scotia
1987-1988	Teacher of the Year, Department of Anesthesia, Wake Forest University Medical Center, Winston-Salem, NC
1989	First Prize, Poster, Gertie Marx Symposium, 21st Annual Meeting of the Society for Obstetric Anesthesia and Perinatology, Seattle, WA
1991	Honorary Member, Sociedad de Anaesthesiologia de Chile
1993	Research Travel Award, The Wellcome Fund, for research with P.M. Headley, Ph.D., University of Bristol
1993-Present	Listed in <i>The Best Doctors in America</i>
1996	Honorary Member, Belgium Society of Anaesthesia and Reanimation
1997	Honorary Member, Australian Society of Anaesthetists
1998	Wake Forest University School of Medicine Established Investigator in Clinical Science Award
1999	Grant was selected by the NIH to present to the U.S. Congress as an example of defense of the NIH budget.
1999	Selected as the institutional candidate for the national investigator of the year award to the NIH GCRC.
2002	Best paper of the meeting award, 34 th Annual Meeting of the Society for Obstetric Anesthesia and Perinatology, Hilton Head, SC

EPONYMOUS LECTURES

1995	Professor Cabrerra Lecturer, II Pan American Symposium on Regional Anesthesia, Vina del Mar, Chile
1996	Hamilton S. Davis Lecturer, University of California, Davis

HONORS AND AWARDS: (Continued)

EPONYMOUS LECTURES

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| 1997 | Benjamin J. Covino Lecturer, Brigham and Women's Hospital, Harvard University |
| 1998 | Norman Blass Lecturer, University of Texas, Galveston |
| 1998 | Robert W. Virtue Lecturer, University of Colorado |

VISITING PROFESSORSHIPS

- | | |
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| 1987 | Mayo Clinic |
| 1988 | Maine Medical Center
Anaquest, Inc.
Naval Medical Center, Portsmouth, VA |
| 1989 | Memorial Sloan Kettering Cancer Center
Virginia Mason Clinic
Dalhousie University, Halifax
University of Iowa |
| 1990 | University of California at San Diego
University of Maryland
Georgetown University |
| 1991 | University of Basel, Basel, Switzerland
Department of Anesthesia, Lucerne, Switzerland
University of South Florida
University of Oregon
Université de Montreal
Tulane University
Columbia University |
| 1992 | State University of New York, Brooklyn, NY
Johns Hopkins University
University of Washington
University of Colorado
Duke University
University of British Columbia |
| 1993 | University of Georgia
McGill University
Brigham and Women's Hospital, Harvard University |
| 1994 | University of California, Los Angeles
University of West Virginia |

HONORS AND AWARDS: (Continued)

VISITING PROFESSORSHIPS

1995	Hopital Henri Mondor, Paris Medical College of Wisconsin University of South Carolina University of Vienna, Austria
1996	University of California, Davis Georgetown University Massachusetts General Hospital, Harvard Medical School University of Texas, Houston Pennsylvania State University
1997	New York University University of Arizona Duke University University of Perth, Australia University of Toulouse, France University of Muenster, Germany
1998	University of Texas, Galveston University of Colorado University of Sao Paulo, Brazil Mayo Clinic University of Utah
1999	University of Bern, Switzerland University of Zurich, Switzerland University of Munster, Germany McGill University University of Tunisia
2000	Columbia University University of Basel, Switzerland
2002	University of Pittsburgh

PROFESSIONAL INTERESTS:

RESEARCH IN PROGRESS

The effect of acute pain on spinal release of norepinephrine and acetylcholine

Interactions between opioids, α_2 -adrenergics, and cholinergics in analgesia

GRANTS CURRENT AND PENDING:

2003-2006	National Institutes of Health (NIDA) \$550,000 (Total direct costs) Feldman, SR (PI); Co-Investigator (5%) Opioid Blockade in Tanning Bed Users
2002-2007	National Institutes of Health (P01-NS41386) \$4,288,641 (Direct costs for 2002 \$882,193) Center for Study of Pharmacologic Plasticity in the Presence of Pain
2002-2003	<u>King Research and Development, Inc.</u> Adenosine Modulators in the Treatment of Pain
2002-2003	<u>Cypress Pharmaceuticals</u> Preclinical Study of Milnacipran for the Treatment of Visceral Pain
1992-2006	National Institutes of Health (RO1 - GM48085) \$2,695,441 (Direct costs for 2002 \$192,159) Systematic Study of Selective Spinal Analgesia in Humans
1990-2003	National Institutes of Health (R01 - GM35523) \$3,117,117 (Direct costs for 2002 \$238,685) Spinal Alpha ₂ -Adrenergic Analgesia

PAST GRANT HISTORY:

2001-2002	<u>Adolor Corporation</u> Kappa opioid receptor function on visceral afferents
2000-2001	<u>Adolor Corporation</u> Evaluation of pain relief from ADL-10- 0101 patients with chronic pancreatitis
1999-2001	<u>Medco</u> Adenosine Modulators in the Treatment of Pain
1998-2001	National Institutes of Health (DA12367) \$654,576 (Direct costs for 2000 \$198,650) Sex Differences in Cholinergic Mediated Analgesia
1999-2000	<u>Adolor Corporation</u> Peripheral Kappa Opioid Analgesic Visceral Pain

PAST GRANT HISTORY: (Continued)

1999-2000	Wake Forest University School of Medicine Women's Health Initiative <u>Development of a Model for the Study of Labor Pain</u>
1998	Roxane Laboratories, Inc. <u>Epidural vs. Intrathecal Clonidine for Pain Relief</u>
1997-1998	Orion Pharmaceuticals <u>Study of Analgesia and Cardiovascular Effects of MPV-2426</u>
1985-1987	National Institutes of Health (R23-GM35523) \$69,079 Epidural clonidine analgesia in obstetrics: Sheep Studies
1986-1988	Food and Drug Administration \$45,619 Epidural clonidine for postoperative pain control
1987-1990	National Institutes of Health (R29-GM35523) \$280,077 Epidural clonidine analgesia in obstetrics
1988-1989	Wake Forest University Medical Center (Intramural Research Support) <u>Characterization of a primate model of visceral pain</u>
1989-1994	Fujisawa Pharmaceutical Co. <u>Epidural clonidine analgesia: clinical trials</u>
1989-1993	Farmos Group, Ltd. <u>Intraspinal dexmedetomidine: preclinical studies</u>
1996	Abbott Laboratories <u>Analgesia from IV Dexmedetomidine</u>
1997	Roxane Laboratories <u>Intrathecal versus Intravenous Clonidine for Pain Relief</u>

BIBLIOGRAPHY:

CHAPTERS IN BOOKS: (18)

Eisenach JC. Orthopedic disease. In: James FM III, Wheeler AS, Dewan DM, eds. *Obstetric Anesthesia: The Complicated Patient*, 2nd ed. Philadelphia: Davis, 1988:231-242.

Eisenach JC. Spinal opiate administration in cancer pain management. In: Foley KM, Payne R, eds. *Current Therapy of Pain*. B.C. Decker 1988:400-408.

Eisenach JC. Patient-controlled analgesia for the treatment of obstetric pain: Post-cesarean delivery. In: Ferrante FM, Ostheimer GW, Covino BG, eds. *Patient-controlled Analgesia*. Boston: Blackwell Scientific Publications, 1990:122-128.

Eisenach JC. Labor pain. In: Bond MR, Charlton JE, Woolf CJ, eds. *Proceedings of the VIth World Congress on Pain*. Amsterdam: Elsevier, 1991:447-452.

Eisenach JC. Intraspinal α_2 -adrenergic analgesia in sheep. In: Short CE, van Poznak A, eds. *Animal Pain*. New York: Churchill Livingstone, 1992:277-280.

Eisenach JC. Pain relief in obstetrics. In: Raj P, ed. *Practical Management of Pain*, St. Louis: Mosby Year Book, 1992:391-408.

Eisenach JC, Bucklin BA. Future trends in epidural and spinal analgesia. In: Sinatra RS, Hord AH, Ginsberg B, Preble LM, eds. *Acute Pain: Mechanisms & Management*. St. Louis: Mosby Year Book, 1992:304-311.

Eisenach JC. Obstetric Pain. In: Ready LB, Edwards WT, eds. *Management of Acute Pain: A Practical Guide*. Seattle: IASP Publications 1992:57-64.

Eisenach JC. Incidence of postoperative pain and predisposing factors. In: Bonnet F, ed. *Pain Control in Surgical Practice*. Oxford: Arnette Blackwell, 1993:51-60.

Eisenach JC. Epidural and spinal narcotics. In: Barash PG, ed. *ASA Refresher Courses in Anesthesiology*. Philadelphia: J.B. Lippincott 1993:65-79.

Eisenach JC. Uteroplacental blood flow. In: Chestnut DH, ed. *Obstetric Anesthesia: Principles and Practice*. St. Louis: Mosby Year Book 1994:43-56.

D'Angelo R, Eisenach JC. Modern epidural techniques. In: Bogod D, ed. *Baillière's Clinical Anaesthesiology-Obstetric Anesthesia*. London: Baillière Tindall 1995;9:623-632.

Eisenach JC. Postoperative analgesia in obstetrics. In: Dewan DM, Hood DD, Writer WDR, eds. *Practical Obstetric Anesthesia*. Philadelphia: W.B. Saunders Co., 1997:321-331.

Eisenach JC. Analgesic drug classes in the management of clinical pain: alpha 2 agonists. In: Biebuyck JF, Lynch C III, Maze M, Saidman LJ, Yaksh TL, Zapol WM, eds. *Anesthesia: Biologic Foundations*. Philadelphia: Lippincott-Raven, 1998:935-942.

Eisenach JC. Clinical implementation of agents for spinal delivery. In: Yaksh TL, ed. *Spinal Drug Delivery*. Amsterdam: Elsevier, 1999:439-456.

BIBLIOGRAPHY: (Continued)

(02/21/03- Anes)

CHAPTERS IN BOOKS:

Eisenach JC. Uteroplacental blood flow. In: Chestnut DH, ed. *Obstetric Anesthesia: Principles and Practice*, 2nd Edition. St. Louis: Mosby, 1999;43-56.

Eisenach JC, Gebhart GF. Spinal drug interactions. In: Sawynok J, Cowan A, eds. *Novel Aspects of Pain Management. Opioids and Beyond*. New York: Wiley-Liss, Inc., 1999;345-362.

Eisenach JC, Hughes SC. Intraplasmic opiates in obstetrics. In: Hughes SC, Rosen R, eds. *Obstetric Anesthesia*, 4th edition. Philadelphia: Lippincott Williams and Wilkins 2002;149-188.

IN PRESS: (1)

Lavand'homme P, Eisenach JC. Spinal alpha2-adrenergic agonists for intractable cancer pain. In: Bountra, Munglani, Schmidt, eds. *Current Understanding, Emerging Therapies, and Novel Approaches to Drug Discovery*. New York: Marcel Dekker, Inc.

JOURNAL ARTICLES: (158)

Vandlen RL, Wu WC-S, Eisenach JC, Raftery MA. Studies of the composition of purified Torpedo californica acetylcholine receptor and its subunits. *Biochemistry* 1979;18:1845-1854.

Shafer RH, Chase ES, Eisenach J. Slow repair of x-ray-induced DNA damage in rat 9L cells in vitro analyzed by viscoelastometry. *Radiat Res* 1981;85:47-56.

Eisenach JC, Nugent M, Miller FA Jr, Mucha P Jr. Echocardiographic evaluation of patients with blunt chest injury: Correlation with perioperative hypotension. *Anesthesiology* 1986;64:364-366.

Eisenach JC, Dewan DM, Rose JC, Angelo JM. Epidural clonidine produces antinociception, but not hypotension, in sheep. *Anesthesiology* 1987;66:496-501.

Eisenach JC, Grice SC, Dewan DM. Epinephrine enhances analgesia produced by epidural bupivacaine during labor. *Anesth Analg* 1987;66:447-451.

Eisenach JC, Grice SC. Epidural clonidine does not decrease blood pressure or spinal cord blood flow in awake sheep. *Anesthesiology* 1988;68:335-344.

Eisenach JC. Intravenous clonidine produces hypoxemia by a peripheral alpha-2 adrenergic mechanism. *J Pharmacol Exp Therapeutics* 1988;244:247-252.

Eisenach JC, Grice SC, Dewan DM. Patient-controlled analgesia following Cesarean section: A comparison with epidural and intramuscular narcotics. *Anesthesiology* 1988;68:444-448.

Eisenach JC, Castro MI, Rose JC, Dewan DM. Intravenous clonidine toxicity in pregnant ewes. *Am J Obstet Gynecol*, 1988;160:471-476.

Eisenach JC, Castro MI, Rose JC, Dewan DM, Grice SC. Epidural clonidine analgesia in obstetrics: Sheep studies. *Anesthesiology* 1989;70:51-56.8

BIBLIOGRAPHY: (Continued)

JOURNAL ARTICLES:

Eisenach JC. Fetal stress/distress. In: Hood DH, ed. Obstetric anesthesia: Problems in Anesthesia 1989;3:19-31.

Eisenach JC, Plevak DJ, VanDyke RA, Southorn PA, Danielson DR, Krom RA, Nagorney DM, Rettke SR. Postoperative analgesic requirements are less following liver transplantation than cholecystectomy. Mayo Clin Proc 1989;64:356-359.

Castro MI, Eisenach JC. Pharmacokinetics and dynamics of intravenous, intrathecal, and epidural clonidine in sheep. Anesthesiology 1989;71:418-425.

Eisenach JC, Lysak SZ, Viscomi CM. Epidural clonidine analgesia following surgery: Phase I. Anesthesiology 1989;71:640-646.

Eisenach JC, Rauck RL, Buzzanell C, Lysak SZ. Epidural clonidine analgesia for intractable cancer pain: Phase I. Anesthesiology 1989;71:647-652.

Eisenach JC, Castro MI. Maternally administered esmolol produces fetal β -adrenergic blockade and hypoxemia in sheep. Anesthesiology 1989;71:718-722.

Lysak SZ, Eisenach JC, Dobson CE II. Patient-controlled epidural analgesia during labor: A comparison of three solutions with a continuous infusion control. Anesthesiology 1990;72:44-49.

Grice SC, Eisenach JC, Dewan DM. Labor analgesia with epidural bupivacaine plus fentanyl: Enhancement with epinephrine and inhibition with 2-chloroprocaine. Anesthesiology 1990;72:623-628.

Eisenach JC, Dewan DM. Intrathecal clonidine in obstetrics: Sheep studies. Anesthesiology 1990;72:663-668.

Mendez R, Eisenach JC, Kashtan K. Epidural clonidine analgesia after cesarean section. Anesthesiology 1990;73:848-852.

Eisenach JC, Dobson CE II, Inturrisi CE, Hood DD, Agner PB. Effect of pregnancy and pain on cerebrospinal fluid immunoreactive enkephalins and norepinephrine in healthy humans. Pain 1990;43:149-154.

Eisenach JC. New drugs for central neuraxis blockade. Current Opinion in Anesthesiology 1990;3:731-734.

Viscomi CM, Hood DD, Melone PJ, Eisenach JC. Fetal heart rate variability after epidural fentanyl during labor. Anesth Analg 1990;71:679-683.

Eisenach JC, Mandell G, Dewan DM. Maternal and fetal effects of labetalol in pregnant ewes. Anesthesiology 1991;74:292-297.

Eisenach JC, Tong C. Site of hemodynamic effects of intrathecal α_2 -adrenergic agonists. Anesthesiology 1991;74:766-771.

BIBLIOGRAPHY: (Continued)

(02/21/03- Anes)

JOURNAL ARTICLES:

Viscomi CM, Eisenach JC. Patient controlled epidural analgesia during labor. *Obstet Gynecol* 1991;77:348-352.

Eisenach JC, Schlairet TJ, Dobson CE II, Hood DH. Effect of prior anesthetic solution on epidural morphine analgesia. *Anesth Analg* 1991;73:119-123.

Eisenach JC. Pain management in the parturient--theoretical and practical aspects. *Sem Anesth* 1992;11:55-65.

Huntoon M, Eisenach JC, Boese P. Epidural clonidine after cesarean section: Appropriate dose and effect of prior local anesthetic. *Anesthesiology* 1992;76:187-193.

Tong C, Eisenach JC. The vascular mechanism of ephedrine's beneficial effect on uterine perfusion during pregnancy. *Anesthesiology* 1992;76:792-798.

Eisenach JC. New understanding and treatment of acute pain. *Sem Anesth* 1992;11:106-113.

Eisenach JC, Tong C, Stump DA, Block SM. Vasopressin and fetal cerebrovascular regulation. *Am J Physiol* 1992;263:R376-R381.

Eisenach JC, Tong C, Limauro D. Intrathecal clonidine and the response to hemorrhage. *Anesthesiology* 1992;77:522-528.

Eisenach J, Detweiler D, Hood D. Hemodynamic and analgesic actions of epidurally administered clonidine. *Anesthesiology* 1993;78:277-287.

Williams JS, Tong C, Eisenach JC. Neostigmine counteracts spinal clonidine-induced hypotension in sheep. *Anesthesiology* 1993;78:301-307.

Detweiler DJ, Eisenach JC, Tong C, Jackson C. A cholinergic interaction in α_2 adrenergic-mediated antinociception in sheep. *J Pharmacol Exp Ther* 1993;265:536-542.

Eisenach JC. Overview: First international symposium on α_2 -adrenergic mechanisms of spinal anesthesia. *Reg Anesth* 1993;18:i-vi.

Rauck RL, Eisenach JC, Jackson K, Young LD, Southern J. Epidural clonidine treatment for refractory reflex sympathetic dystrophy. *Anesthesiology* 1993;79:1163-1169.

Scott DB, Dittmann M, Clough DGF, van Steenberghe A, Morrison LMM, van Zundert A, Joos SS, Eisenach JC. Atravcan: a new needle for spinal anesthesia. *Reg Anesth* 1993;8:213-217.

Jackson C, Eisenach JC. Spinal administration of α_2 -adrenergic agonists. *Quarterly Review of Anesthetic Pharmacology Review* 1993;1:288-296.

Tong C, Eisenach JC. Alpha₂ adrenergic agonists. *Anes Clin North America* 1994;12:49-63.

BIBLIOGRAPHY: (Continued)

JOURNAL ARTICLES:

Li P, Tong C, Eisenach JC. NMDA causes release of nitric oxide from rat spinal cord in vitro. *Brain Res* 1994;637:287-291.

Eisenach JC, Tuttle R, Stein A. Is ST segment depression during cesarean section merely due to cardiac sympathetic block? *Anesth Analg* 1994;78:287-292.

Eisenach JC, Shafer SL, Bucklin BA, Jackson C, Kallio A. Pharmacokinetics and pharmacodynamics of intraspinal dexmedetomidine in sheep. *Anesthesiology* 1994;80:1349-1359.

Blanche R, Eisenach JC, Tuttle R, Dewan DM. Previous wet tap does not reduce success rate of labor epidural analgesia. *Anesth Analg* 1994;79:291-294.

D'Angelo R, Anderson MT, Philip J, Eisenach JC. Intrathecal sufentanil compared to epidural bupivacaine for labor analgesia. *Anesthesiology* 1994;80:1209-1215.

Eisenach JC, D'Angelo R, Taylor C, Hood DD. An isobolographic study of epidural clonidine and fentanyl after cesarean section. *Anesth Analg* 1994;79:285-290.

Eisenach JC. Alpha-2 agonists and analgesia. *Exp Opin Invest Drugs* 1994;3:1005-1010.

Lothe A, Li P, Tong C, Yoon Y, Bouaziz H, Detweiler DJ, Eisenach JC. Spinal cholinergic- α_2 -adrenergic interactions in analgesia and hemodynamic control: role of muscarinic receptor subtypes and nitric oxide. *J Pharmacol Exp Ther* 1994;270:1301-1306.

Yaksh TL, Grafe MR, Malkmus S, Rathbun ML, Eisenach JC. Studies on the safety of chronically administered intrathecal neostigmine methylsulfate in rats and dogs. *Anesthesiology* 1995;82:412-427.

Hood DD, Eisenach JC, Tong C, Tommasi E, Yaksh TL. Cardiorespiratory and spinal cord blood flow effects of intrathecal neostigmine methylsulfate, clonidine, and their combination in sheep. *Anesthesiology* 1995;82:428-435.

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LECTURES, SPEECHES, EXHIBITS, FILMS:

INVITED LECTURES:

- | | |
|------|--|
| 1987 | Iowa Society of Anesthesiologists
Refresher Course in Critical Care Medicine,
American Society of Critical Care Anesthesiologists
Twin Cities Anesthesia Society |
| 1988 | North Carolina Association of Nurse Anesthetists
American Society of Anesthesiologists (Panel)
Workshop on Patient Controlled Analgesia,
American Society of Regional Anesthesia |
| 1989 | St. Louis Society of Anesthesiologists
Society for Obstetric Anesthesia and Perinatology
Nova Scotia Division of the Canadian Anaesthetists' Society
American Society of Anesthesiologists (2 Workshops)
American Pain Society (Workshop) |
| 1990 | American Society of Regional Anesthesia
Plenary Lecture, World Congress of the International Association for
the Study of Pain
Society of Cardiovascular Anesthesiologists
Symposium on Animal Pain and its Control,
Cornell University College of Veterinary Medicine
San Diego Society of Anesthesiologists
American Society of Anesthesiologists
(Refresher Course Lecture, Workshop, Panel)
Update on Anesthesia, University of California at Davis
Postgraduate Assembly of the New York State Society of
Anesthesiologists (Workshop) |
| 1991 | American Society of Regional Anesthesia
Regional Refresher Course of the American Society of
Anesthesiologists
Henry S. Ruth Conference, Hahnemann University
Washington State Society of Anesthesiologists and British
Columbia Anaesthetists Society
First European Conference on Pain Research, Brussels
American Society of Anesthesiologists (Session Moderator, Panel)
19th Congress Chileno de Anestesiologia, Vinadel Mar, Chile
Emory Review Course in Regional Anesthesia
American Society of Regional Anesthesia (Refresher Course
Lecture, Moderator) |
| 1992 | Obstetrical Anesthesia, University of California
at San Francisco
Seattle Anesthesia Society
Regional Refresher Course of the American Society
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Society for Obstetric Anesthesia and Perinatology
American Society of Anesthesiologists (Refresher Course
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World Congress of Anesthesiologists
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Anesthesia
Maritime Division of Canadian Anaesthetists Society,
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- 1993
Simposio Anestesia Regional, Santiago, Chile
First Pan American Symposium on Regional Anesthesia,
Sao Paulo, Brazil
Experimental Biology Meeting (FASEB Panel)
Society for Obstetric Anesthesia and Perinatology
International Symposium on α_2 -Adrenergic Mechanisms in Spinal
Analgesia, Lucerne, Switzerland
Department of Physiology, University of Bristol, England
American Society of Anesthesiologists (Refresher Course Lecture)
6th International Congress on Pain, Anesthesia, and
Endocrinology, Chicago, IL
- 1994
Advances in Therapeutic Development for Chronic Pain,
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American Society of Regional Anesthesia (Refresher Course
Lecture, Workshop)
VIII International Symposium in Heidelberg, Germany
American Society of Anesthesiologists (Refresher Course Lecture,
Session Moderator)
8th Annual Anesthesia and Critical Care Conference, University of
Chicago, Illinois
Congres Agora: Review of Regional Anesthesia, Rennes, France
- 1995
American Society of Regional Anesthesia Annual Meeting
Obstetric Anaesthetists Association Annual Meeting, York, England
European Society of Anaesthesiologists Annual Meeting, Paris
Regional Refresher Course of the American Society of
Anesthesiologists, Milwaukee, Wisconsin
American Society of Anesthesiologists (Refresher Course Lecture,
Chairman of Panel)
Inaugural Meeting of "Advances in Physiology and Pharmacology in
Anesthesia and Critical Care 1995," Asheville, North Carolina.
Obstetric Anaesthetists Update on Obstetric Anaesthesia, Basel,
Switzerland
Prof. Cabrera Lecture (keynote address). II Pan American
Symposium on Regional Anesthesia, Vinadelmar, Chile
Advances in Physiology and Pharmacology in Anesthesia and
Critical Care, Asheville, North Carolina

LECTURES, SPEECHES, EXHIBITS, FILMS: (Continued)

(02/21/03- Anes)

- 1996
- American Society of Regional Anesthesia Annual Meeting
 - International Symposium on Regional Anesthesia, Auckland, New Zealand
 - Future Directions of Acute Pain Management, Orlando, Florida
 - Spinal Anesthesia and Analgesia, Copenhagen, Denmark
 - World Congress on Pain, International Association for the Study of Pain, Vancouver, Canada
 - Spinal Analgesics, From Animals to Humans, Whistler Mountain, Canada
 - American Society of Anesthesiologists (Refresher Course Lecture, Panel)
 - Belgium Society of Anaesthesia and Reanimation (Keynote Lecture)
 - Postgraduate Assembly of the New York State Society of Anesthesiologists
- 1997
- Fifth European Conference on Pain Research (Brugge, Belgium)
 - Journées D'enseignement Post-Universitaire (Paris, France)
 - Advances in Clinical Anesthesiology, Mayo Clinic Conference
 - American Society of Regional Anesthesia Annual Meeting
 - Australian Society of Anaesthetists
 - Postgraduate Assembly of the New York State Society of Anesthesiologists
 - Scandinavian Society of Anaesthesiologists, Stockholm
 - Symposium on Outcome Studies in Postoperative Analgesia, Muenster, Germany
 - IBC Conference on Novel Analgesics, Washington
 - Anesthesiology Update, Hilton Head Island, South Carolina
 - Spinal Drug Delivery, Anatomy, Kinetics, and Toxicology, Delmar, California
- 1998
- California Society of Anesthesiologists, Maui, Hawaii
 - Twenty-sixth Annual Review Course, University of Alabama
 - Simpósio Internacional Avanco na Terapeutica da Dor Pos Operatoria, Ribeirao Preto, Brazil
 - Obstetrical Anesthesia: 1998, University of California, San Francisco
 - Spring Pain Research Conference, Grand Cayman, BWI
 - Muscarinic Pharmacology, Danvers, MA
 - Johns Hopkins University Review Course on Pain Medicine, Baltimore, MD
 - European Society of Regional Anesthesia Annual Meeting Refresher Course
 - American Society of Anesthesiologists Annual Meeting Refresher Course Anesthesiologists
 - Physiology and Pharmacology Review Course by WFUSM, Department of Anesthesiology, Greenbrier, WV
 - Postgraduate Assembly of the New York State Society of Anesthesiologists

LECTURES, SPEECHES, EXHIBITS, FILMS: (Continued)

- 1999
- Review Course on Obstetric Anesthesia (ASRA/SOAP), Steamboat Springs, CO
 - Tunisian Society of Anesthesiologists Annual Meeting
 - American Society of Regional Anesthesia Annual Meeting
 - Berzelius Symposium of the Swedish Medical Society: Safe and Effective Relief of Labour Pain-A goal for the Future, Stockholm, Sweden
 - 18th International Congress of the Israel Society of Anesthesiologists, Haifa, Israel
 - 9th World Congress on Pain (Refresher Course Lecturer) Vienna, Austria
 - 3rd World Federation of Sleep Research Dresden, Germany
 - European Society of Regional Anesthesia Brussels, Belgium
 - American Society of Anesthesiologists Annual Meeting Refresher Course
- 2000
- Spring Pain Research Conference, Grand Cayman, BWI
 - The Pain Society of the United Kingdom Annual Scientific Meeting, Warwick, UK
 - North Carolina Pain Society Annual Meeting
 - Fourth International Symposium of Anesthesiology and Intensive Care, Sao Paulo, Brazil
 - National Heart, Lung and Blood Institute Conference on Perioperative Medicine
 - American Pain Society Annual Meeting
 - American Society of Anesthesiologists Annual Meeting Refresher Course Lecture
 - European Annual Meeting, Rome, Italy
 - Texas Anesthesia Conference on Obstetrics Annual Meeting
 - International Symposium on Regional Anesthesia, Quebec City, Canada
 - University of Kansas Annual Review Course in Anesthesia
 - California Society of Anesthesiologists, Hawaiian Seminar
- 2001
- Review Course on Obstetric Anesthesia (ASRA/SOAP) Steamboat Springs, CO
 - Acute and Chronic Pain Management in the Third Millennium, Universitaire Ziekenhuizen, Leaven, Belgium
 - Arizona State Society of Anesthesiologists Annual Meeting
 - ASRA Conference on Local Anesthetic Toxicity, Miami Beach, FL
 - Minnesota Society of Anesthesiologists Annual Meeting, Minneapolis, MN
- 2002
- Current Topics in Pain Management (Mayo Clinic), Scottsdale, AZ
 - Current Topics in Anesthesiology (Mayo Clinic), Scottsdale, AZ
 - Plenary Session Lecture: Annual Meeting of the Canadian Society of Anaesthesiology, Victoria, BC